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A beginner's guide to student Flutes (May 2022)

Although a Flute is classed as a woodwind instrument, most modern Flutes are made of metal, although the use of plastic or resin or composite materials is growing. Very old Flutes, folk Flutes, and some professional Flutes are made of wood.

The Flute family consists of Flutes of different sizes and all but young beginners (less than 9yrs old) start on the most common member of the family – the 'C soprano concert Flute' - it is so common that people usually just call it *the* Flute. Children under 9yrs old usually either start on a Recorder or a Fife (a type of small flute) before progressing to the Flute.

Flutes for young children: 'Fifes'

Traditionally children used to start Recorder at the age of 7 or 8 before progressing onto the Flute at the age 9 or 10 at which point they would make rapid progress; this was partly because it is best for children to wait until they are able to support the weight of the flute and reach the keys without developing a bad posture or poor finger positioning, but also because a student Recorder is a very cheap instrument requiring no maintenance and every child can get a note out of it straightaway; also it is easy for the child to hold and introduces the child to the fundamentals of any wind instrument (and generally any melodic instrument). Despite the many obvious advantages of the Recorder (cost, reliability, ease of playing, range of notes) there is an insistence on getting children to play 'flute like' instruments at a very young age but even shortened flutes with modified head-joints (see below) can be too heavy or large for the small child so some teachers start their pupils on so called '**Fifes**' (not true Fifes but similar) or use the Fife as a transition instrument from Recorder to Flute.

These Fife-like instruments are made of plastic and are the size of a piccolo (less than half the size of a standard flute) and are pitched in C and play an octave higher than the standard flute, however unlike a standard Piccolo (or true Fife) they play down to C (instead of D). Teachers can use most of the same teaching materials as for Flute (or Recorder) and can even establish an ensemble including both Flute and Fife players.

Despite its small size and low weight, a Fife can still be difficult to hold correctly and it can be difficult to get a note straight away, but an advantage of Fifes (compared to Flutes) is that different Fifes have different embouchure surfaces. With Fifes there are three available designs of embouchure surface (where the player rests the lower lip and blows into the instrument). The first is the **traditional embouchure** (or standard embouchure) which is where the surface around the embouchure hole is a flat curve following the shape of the outside of the instrument, the second is the raised **flute style lip-plate** (that looks like a flute lip plate only smaller – this can help the player locate the embouchure hole) and the third is the raised **reform lip-plate** (also known as 'high' wave embouchure – this looks similar to a flute style lip-plate but has a distinct wide 'V' profile – this can help the player direct the air they blow into the embouchure hole).

Ideally a child beginner should try all three types of embouchure surface to find which is easiest for them to blow and sound a note. Due to the very low cost of these plastic Fifes it would be easy for a school or teacher to keep a selection of the different types for a child to try before deciding which was easiest for them to play. One model of Fife - (**TooT**) is supplied with a detachable Recorder fipple (mouthpiece) so a child can start the instrument knowing that they can get a sound immediately – once they are used to holding the instrument and playing the notes they can remove the Recorder fipple and attempt to play the instrument in the conventional manner.

Four of the six models of 'Fife' currently available for children do not have keys – meaning there is little that can go wrong with the instrument, but there is a limitation in the range of notes available and thus the music that can be played (although this would only become a problem if the child progressed significantly on the instrument, rather than moving on to the Flute).

Some teachers do not like keyless Fifes because it is difficult for the child to feel the holes under their fingers and also some notes can be difficult to produce. **TooT** and **Guo** both make 'Fifes' with keys (making it even more similar to a Flute) these keyed 'Fifes' make it easier for the child to cover the holes and to play more complex music (and therefore able to match the much cheaper Recorder!). The keyed Toot is a significant development, it has all the notes from Low C (an octave above the flute and equivalent to Descant Recorder Low C) up an octave and a half to G in the second register, but of most significance are the fingerings - it is certainly easier for a child to play the notes on the keyed Toot than on any other Fife (including the Guo keyed Fife) so it could prove to be a popular beginner instrument.

It is always essential to enable a child to play the instrument they are attracted to (if possible) so a Fife can be a way of satisfying a young child's desire to play a flute-like instrument as a precursor to playing a standard (or shortened standard) Flute. If you are considering purchasing a beginner's 'Fife' consult with the teacher first as they will have to consider other factors such as available teaching resources for the instrument.

The 'standard' Flute

There are three parts to a Flute: -

- The **head-joint** this has the **embouchure hole** into which the player blows.
- The long tube called the **body** on which are found most of the **'keys'** these are operated by the player's fingers so that various **pads** either cover or uncover the **tone-holes** to make different musical notes.
- The short tube called the **foot-joint** which has three keys on it. The foot-joint fits onto the **tenon** at the bottom end of the Flute body, and the head-joint fits into the **socket** at the top end of the body.

The keys on the Flute make up the mechanism of the instrument. The keys are supported between 'pillars' on screws or rods. Each key has a wire spring that keeps it held open or held shut. Most of the keys have a key cup in which there is fitted a pad to cover a 'tone-hole'. The keys also have cork or felt glued on to function as a 'stop' so that each key opens the correct amount. The pads, corks, and felts on the instrument (and also the adhesives which keep these items in place) deteriorate over time. On older or poorer quality instruments the mechanism itself starts to wear and the keys can become loose or jammed. Although not a part of the instrument there is one vital accessory – the case. A case that holds the instrument snugly will protect the instrument during transport - a poor fitting case will damage the instrument!

Modified head-joints for children

Children usually may start the Recorder (or 'Fife) at the age of 7 or 8 before transferring (if they wish to) to the Flute at age 9 or 10 when they are able to support the weight of a regular sized Flute and reach the keys without developing a bad posture or poor finger positioning. To assist small children some manufacturers supply their student models with an additional modified head-joint so that the child has less difficulty stretching to reach the keys on the body of the Flute – the child can progress to the straight head-joint when s/he has grown (unfortunately many children start on a straight head-joint too early and this encourages bad playing habits that need correcting at a later stage).

There are two types of adapted Head-joint: the **curved head-joint** and the **looped head-joint**, the concept behind both is to bring the body of the instrument within reach of the child so that the child has less difficulty stretching to reach the keys on the body of the Flute – the child can progress to the straight head-joint when s/he is older and can reach all of the keys comfortably. Curved head-joints are made by all the big manufacturers of student instruments so most models of student instruments can be bought with a curved head-joint or both a curved and straight head-joint, but the looped head-joint is a recent innovation by **Jupiter** under the brand name 'Waveline'.

The difference between these two types of modified head-joint (apart from the shape) is how the position of the lip-plate relates to the position of the body of the instrument and how the instrument balances. With the curved head-joint the lip-plate is either forward of the body of the Flute (if the head-joint is aligned horizontally with the body) or above the body of the Flute (if the head-joint is aligned vertically with the body) – either way it does not replicate the alignment of a standard straight head-joint so the player's hands are not in standard alignment with the player's head, and there is also a slight issue of balancing the instrument. In contrast the looped head-joint does replicate the alignment of a standard straight head-joint (so the player's hands and head are in standard alignment) and it would seem it also removes any issues of balancing the instrument.

Shortened Flutes for children

These are flutes without the regular foot-joint for the two lowest notes (Low C and C#) and so only play down to D. These two notes are unnecessary for a beginner, but more importantly young children often find it difficult to attach the foot-joint to the body of the instrument and often damage the flute in the process, also the absence of the foot-joint makes the instrument lighter. There are three such shortened flutes currently available.

Nuvo

This company manufactures two plastic flutes especially for children: the shortened '**Jflute**' and the standard size **Nuvo flute** (these are in fact the same instrument but with different attachments). These instruments are light, cheap and virtually maintenance free (but feel horrible under the fingers to experienced players compared to a standard metal flute). The shortened Jflute is supplied with a curved head-joint and it is possible to buy the straight head-joint and foot-joint separately to convert the Jflute to the (standard size) Nuvo flute when the child is ready. These flutes are regarded as disposable flutes because they are very cheap and are not designed to be repaired; their useful lifetime is unknown but they are still probably better value than budget metal flutes.

Jupiter

This company manufactures a good quality metal (silver-plated) shortened flute especially for children called the '**Prodigy**' which is available with either a curved head-joint or (for significantly extra) their branded 'Waveline' looped head-joint. Without the foot-joint the Flute is significantly lighter than a regular size flute but unlike the Jflute, the Prodigy cannot be converted into a regular size flute - a child would need to upgrade to a regular size Flute within a year or two of starting to learn and so it is debateable whether there is an advantage in buying one due to its cost (however the Prodigy Flute could be very useful for schools because its' maintenance costs are lower and it could be continually passed on to new beginners).

All Flutes plus (AFP)

This specialist London shop has started selling a flute 'for very young players' stamped with its own name – the AFP-1K 'Early start' flute. It is a silver-plated shortened flute with a curved headjoint that also has ergonomically designed key extensions especially for children's fingers. Without the foot-joint the Flute is significantly lighter than a regular size flute but as with the Jupiter Prodigy Flute a child would need to upgrade to a regular size Flute within a year or two of starting to learn – however it is significantly cheaper than the Jupiter Prodigy and so this makes more economic sense.

Children who are ultimately interested in playing Saxophone usually start on the Flute (or Clarinet) until their fingers are big enough to reach all the keys of the Saxophone (although the new Trevor James Alpha Sax means they can now start on Saxophone straight away).

Variations in Design

Modern Flutes (other than the special children's ones above, and the Trevor James open G# 10x – discussed below) vary little in the design of the mechanism and therefore they all feel more or less the same to the player. They can vary in tuning to some degree – with poorer quality instruments being difficult to play in tune.

The standard student Flute is usually made of silver-plated metal (although some made be made of other materials) and has covered holes, an off-line G assembly, a straight head-joint, and it may or may not have a split E mechanism; but what does this all mean?

Plastic/Resin/Polymer/Composite: These terms describe a growing number of flutes made various from 'plastic like' materials. These flutes have yet to become established in the market and I have not examined any closely - the two most common makes are Nuvo and the Guo Tocca.

Silver-plated or Solid silver: student Flutes are usually made of a base metal which is then silver-plated. Some student Flutes have a solid silver lip plate which helps prevent the player's lower lip slipping away from the embouchure hole and also avoids corrosion caused by the moisture from the player's lips. Some student Flutes have a silver lip-plate *and* a silver 'chimney' (sometimes called the 'riser') - the chimney is the very short tube that joins the lip-plate to the head-joint. Corrosion of the chimney can also be avoided if it is made of solid silver but more importantly it allows for hand finishing of the embouchure hole which can enhance the sound of the Flute. Top of the range student Flutes have a solid silver head-joint which eliminates corrosion, helps prevent the lower lip from slipping, allows for hand finishing of the embouchure hole, and also means the head-joint can be worked to the shape of design mandrel more accurately (the Silver itself is also said to enrich the tone).

Wooden head-joints: The Trevor James advanced student flute (the Cantabile – no longer in production but available second-hand) was sold with the option of three types of head-joint: wooden, solid Silver, or solid Silver with a wooden lip-plate. Trevor James claimed the wooden head-joint produced a sound more in keeping with the Flute sound of the Baroque and Classical musical era, and so having both a Silver and Wooden head-joint allowed the player to choose the head-joint most appropriate for the music being played. Presumably they considered the Silver head-joint fitted with a wooden lip-plate was a compromise between the two types of head-joint.

Covered holes: nearly all student Flutes have covered holes – this means every hole on the Flute has a metal key to cover it and there is no hole in the metal key. A few student Flutes are openholed which means some of the metal keys have holes in the top which need to be covered by the player's fingers, this makes it more difficult to play initially but encourages good finger positioning which pays off in the long run.

Off-line G mechanism: this means that the keys used to play the note G are slightly offset from the other keys, this mechanism is found on all student Flutes with covered holes. Student Flutes with open holes also usually have an off-line G mechanism but a few have an in-line G mechanism which some players find more comfortable.

Straight head-joint: as explained above, head-joints can be straight, curved, or looped. Only small children need to use a curved or looped head-joint. Most manufacturers make straight and curved head-joints (only Jupiter make looped head-joints).

Split E mechanism: this is an optional feature on all Flutes from the student model to the top professional model. The fact that top professional models are available without it is an indicator that it is not essential. It makes it easier to play some high notes, but at the cost of making other (less used) notes more difficult to play.

Open G#: Trevor James have begun manufacturing a version of their basic student model (the TJ10x) with an open G# (instead of the standard closed G#). Although this is a student instrument it is best avoided by beginners at the moment as there are no teachers for this fingering system (in the UK), although in the long run it could be adopted here (as in other parts of the world) as there are significant advantages to this system which was the original fingering system conceived by Theobald Boehm when he created the modern flute. It might be of interest to established flute players who want to experience a flute closer to Boehm's original design.

Categories of student instruments

Student instruments can be divided into five categories:

Budget student instruments: these are models that are often sold on-line or by local retailers who do not specialize in music (but sometimes even by established music shops). These models are usually manufactured in China and sometimes do not even have a serial number (which means there is no quality control!). These instruments are often much cheaper than the established brands (usually under about £220) and sometimes cheaper even than second-hand standard student instruments; this is because they are of poor quality and will have a very limited lifetime, either because they will soon need repair (but many repairers will not work on these cheaper instruments) or they simply do not meet the needs of anyone but the complete beginner. Some budget instruments are of reasonable quality for the price, but there is no 'brand consistency' so it is impossible to recommend any particular make or model.

Older student instruments: these are models that have not been manufactured for several years but were well made. They are suitable for up to and including grade 5 if in good condition.

Standard student instruments: these are currently manufactured models. They are well-made, reasonably robust instruments suitable up to and including grade 5 if in good condition (and probably beyond grade 5 if looked after); makes include Jupiter and Trevor James.

Premium student instruments: these are currently manufactured models. They are very well made and are suitable up to grade 8 (if regularly serviced). The best examples are Yamaha YFL200 series and Pearl 500 series; both Yamaha and Pearl manufacture a range of Flutes from student up to professional level.

Advanced student instruments: these are either versions of a current premium student model but fitted with a solid silver head-joint (such as the Pearl and Yamaha models) or they are the current entry model of manufacturers who do not make standard student instruments (such as Azumi, Di Zhao, and Miyazawa). The most popular advanced student instrument is the Yamaha 300 series.

Manufacturers and models

There have been dozens of different manufacturers and hundreds of different models over the years; here is a brief description of the most popular current brands.

Jupiter: Jupiter Flutes are well made and are popular with teachers. All regular size models have a silver chimney (riser) and are available with or without split E, and with open holes or covered holes. Jupiter student Flutes come with either a silver-plated straight head-joint or one straight and one curved head-joint; either way the case supplied with the instrument is designed to contain the instrument and the head-joint(s). Jupiter also manufactures the 'Prodigy' starter flute as described earlier. Jupiter's premium and advanced student models are not currently available in the UK.

Trevor James: Trevor James 10x series Flutes are popular with teachers because of the ease with which beginners can get them to sound. Trevor James student Flutes are available with covered or open holes and with or without split-E. The instrument can be supplied with a straight head-joint or a curved head-joint or both. The straight head-joint can also be supplied with a silver lipplate. The tone of the Trevor James premium models (TJ31PF 'privilege') and advanced student models (TJ31 CF 'Chanson' and TJ31CP 'copper body') have made them increasingly popular with players.

Pearl: The Pearl range of models start at the 'premium student' level so they do not manufacture a curved head-joint for young beginners. There are several options at the premium student level: silver-plated head-joint or a silver-plated head-joint with a silver lip-plate and chimney; with or without split E; and open hole or covered hole. Pearl's advanced student Flute is supplied with a solid silver head-joint. Pearl has used different model numbers over the years to indicate slight changes in design, premium student Flute model numbers start with a 5 (501,521 etc), advanced student silver head models start with a 6.

Yamaha: Models come with or without split E, and are available as open hole or covered hole. Yamaha student Flutes come with a silver-plated straight head-joint but a curved head-joint can be purchased separately. Yamaha also make an advanced student Flute with a solid silver headjoint. Yamaha has used different model numbers over the years to indicate slight changes in design, student Flutes model numbers start with a 2 (212,221 etc), advanced student models start with a 3 (312, etc).

The following manufactures have excellent reputations for flute making but have only relatively recently started producing (advanced) student flutes for the UK market.

Azumi: These advanced student Flutes are very well made and are produced by the same wellestablished company that makes Jupiter and the very well-respected Altus flutes; indeed the flutes are supplied with Altus head-joints. The AZ1 has a solid silver lip-plate and chimney; the AZ2 has a solid silver head-joint and is available in two styles of embouchure hole.

Miyazawa: This is a well-known manufacturer of professional flutes that has also recently started producing an advanced student model for the UK market.

Di Zhao: This is a relatively new company in its own right but has a wealth of experience working for some of the most prestigious American flute manufacturers.

<u>Play-testing a Flute before purchase</u>

For a complete beginner this is impossible because the player won't be able to produce a sound. If the player has been playing for 2 or 3 months and can produce a reliable sound then it is worth getting the player to try the instrument before purchasing because the player might find one instrument easier than another; this is largely down to the shape of the embouchure hole, the design of the head-joint, and how well the instrument is working (bear in mind that even brand new instruments might not be working well).

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